

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Joseph M. Jeddeloh Attorney Docket No.: 33582/US
Filed : Concurrently herewith
Title : MEMORY HUB AND METHOD FOR PROVIDING MEMORY SEQUENCING
HINTS

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicant wishes to make known to the Patent and Trademark Office the references set forth on the attached form PTO-1449. Copies of the cited non-patent literature reference, as required under 37 C.F.R. § 1.98(a)(2), are enclosed. Copies of the cited U.S. patents and U.S. patent application publications will not be submitted herewith in accordance with the waiver by the Office of the requirement under 37 C.F.R. § 1.98(a)(2)(i) for U.S. national patent applications filed after June 30, 2003. Although the aforesaid references are made known to the Patent and Trademark Office in compliance with applicant's duty to disclose all information he is aware of which is believed relevant to the examination of the above-identified application, applicant believes that his invention is patentable.

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 09/994,516, describing and claiming subject matter that is similar to the subject matter of this application, was filed on November 26, 2001. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/165,787, describing and claiming subject matter that is similar to the subject matter of this application, was filed on June 7, 2002. This related application, as well as

any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/215,505, describing and claiming subject matter that is similar to the subject matter of this application, was filed on August 9, 2002. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/211,036, describing and claiming subject matter that is similar to the subject matter of this application, was filed on August 2, 2002. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/601,222, describing and claiming subject matter that is similar to the subject matter of this application, was filed on June 20, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/213,038, describing and claiming subject matter that is similar to the subject matter of this application, was filed on August 5, 2002. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/601,104, describing and claiming subject matter that is similar to the subject matter of this application, was filed on June 19, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/238,322, describing and claiming subject matter that is similar to the

subject matter of this application, was filed on September 9, 2002. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/232,842, describing and claiming subject matter that is similar to the subject matter of this application, was filed on August 29, 2002. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/601,253, describing and claiming subject matter that is similar to the subject matter of this application, was filed on June 20, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/232,473, describing and claiming subject matter that is similar to the subject matter of this application, was filed on August 29, 2002. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/601,252, describing and claiming subject matter that is similar to the subject matter of this application, was filed on June 20, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/222,415, describing and claiming subject matter that is similar to the subject matter of this application, was filed on August 16, 2002. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/222,393, describing and claiming subject matter that is similar to the subject matter of this application, was filed on August 16, 2002. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/690,810, describing and claiming subject matter that is similar to the subject matter of this application, was filed on October 20, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/645,288, describing and claiming subject matter that is similar to the subject matter of this application, was filed on August 20, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/644,522, describing and claiming subject matter that is similar to the subject matter of this application, was filed on August 19, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/660,844, describing and claiming subject matter that is similar to the subject matter of this application, was filed on September 12, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/651,801, describing and claiming subject matter that is similar to the subject matter of this application, was filed on August 28, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/665,904, describing and claiming subject matter that is similar to the subject matter of this application, was filed on September 18, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/653,044, describing and claiming subject matter that is similar to the subject matter of this application, was filed on August 28, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/695,383, describing and claiming subject matter that is similar to the subject matter of this application, was filed on October 27, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Applicant also wishes to make known to the Patent and Trademark Office that an application, Serial No. 10/460,588, describing and claiming subject matter that is similar to the subject matter of this application, was filed on June 11, 2003. This related application, as well as any prior art cited therein, may be material to the examination of this application. A copy of this related application as filed is submitted herewith in accordance with 37 C.F.R. § 1.98(d).

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Respectfully submitted,

DORSEY & WHITNEY LLP

A handwritten signature in black ink, appearing to read "Edward W. Bulchis". The signature is fluid and cursive, with a large initial "E".

Edward W. Bulchis

Registration No. 26,847

EWB:dms

Enclosures:

- Postcard
- Form PTO-1449
- Cited References (2)
- Copies of Related Applications (23)

1420 Fifth Avenue, Suite 3400
Seattle, WA 98101
Telephone (206) 903-8800
Facsimile (206) 903-8820

h:\ip\documents\clients\micron technology\30000\33582us\33582us ids w appl.doc

| | | | |
|---|--|---|--|
| FORM PTO-1449 (REV.7-80) | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO. 33582/US | APPLICATION NO. Not yet assigned |
| INFORMATION DISCLOSURE STATEMENT <i>(Use several sheets if necessary)</i> | | APPLICANT(S) Joseph M. Jeddeloh | |
| | | FILING DATE Concurrently herewith | GROUP ART UNIT Not yet assigned |

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|----|-----------------|----------|--------------------|-------|----------|-------------------------------|
| | AA | 5,251,303 | 10/05/93 | Fogg, Jr. et al. | 395 | 275 | |
| | AB | 5,432,907 | 07/11/95 | Picazo, Jr. et al. | 395 | 200 | |
| | AC | 5,442,770 | 08/15/95 | Barratt | 395 | 403 | |
| | AD | 5,497,476 | 03/05/96 | Oldfield et al. | 395 | 439 | |
| | AE | 5,659,798 | 08/19/97 | Blumrich et al. | 395 | 846 | |
| | AF | 5,818,844 | 10/06/98 | Singh et al. | 370 | 463 | |
| | AG | 5,875,352 | 02/23/99 | Gentry et al. | 395 | 843 | |
| | AH | 6,061,263 | 05/09/00 | Boaz et al. | 365 | 51 | |
| | AI | 6,067,262 | 05/23/00 | Irrinki et al. | 365 | 201 | |
| | AJ | 6,073,190 | 06/06/00 | Rooney | 710 | 56 | |
| | AK | 6,105,075 | 08/15/00 | Ghaffari | 710 | 5 | |
| | AL | 6,137,709 | 10/24/00 | Boaz et al. | 365 | 51 | |
| | AM | 6,144,587 | 11/07/00 | Yoshida | 365 | 189.05 | |
| | AN | 6,167,465 | 12/26/00 | Parvin et al. | 710 | 22 | |
| | AO | 6,167,486 | 12/26/00 | Lee et al. | 711 | 120 | |
| | AP | 6,201,724 B1 | 03/13/01 | Ishizaki et al. | 365 | 49 | |
| | AQ | 6,233,376 B1 | 05/15/01 | Updegrove | 385 | 14 | |
| | AR | 6,243,769 B1 | 06/05/01 | Rooney | 710 | 56 | |
| | AS | 6,246,618 B1 | 06/12/01 | Yamamoto et al. | 365 | 200 | |
| | AT | 6,272,609 B1 | 08/07/01 | Jeddeloh | 711 | 169 | |
| | AU | 6,285,349 B1 | 09/04/01 | Smith | 345 | 147 | |
| | AV | 6,301,637 B1 | 10/09/01 | Krull et al. | 711 | 112 | |
| | AW | 6,327,642 B1 | 12/04/01 | Lee et al. | 711 | 120 | |
| | AX | 6,330,205 B2 | 12/11/01 | Shimizu et al. | 365 | 230.06 | |
| | AY | 6,347,055 B1 | 02/12/02 | Motomura | 365 | 189.05 | |

EXAMINER

DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

| | | | |
|---|--|---|--|
| FORM PTO-1449 (REV. 7-80) | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO. 33582/US | APPLICATION NO. Not yet assigned |
| INFORMATION DISCLOSURE STATEMENT <i>(Use several sheets if necessary)</i> | | APPLICANT(S) Joseph M. Jeddleloh | |
| | | FILING DATE Concurrently herewith | GROUP ART UNIT Not yet assigned |

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|----|-----------------|----------|-------------------|-------|----------|-------------------------------|
| | AZ | 6,349,363 B2 | 02/19/02 | Cai et al. | 711 | 129 | |
| | BA | 6,356,573 B1 | 03/12/02 | Jonsson et al. | 372 | 46 | |
| | BB | 6,367,074 B1 | 04/02/02 | Bates et al. | 717 | 11 | |
| | BC | 6,373,777 B1 | 04/16/02 | Suzuki | 365 | 230.03 | |
| | BD | 6,381,190 B1 | 04/30/02 | Shinkai | 365 | 230.03 | |
| | BE | 6,421,744 B1 | 07/16/02 | Morrison et al. | 710 | 22 | |
| | BF | 6,434,639 B1 | 08/13/02 | Haghighi | 710 | 39 | |
| | BG | 6,462,978 B2 | 10/08/02 | Shibata et al. | 365 | 63 | |
| | BH | 6,463,059 B1 | 10/08/02 | Movshovich et al. | 370 | 389 | |
| | BI | 6,470,422 B2 | 10/22/02 | Cai et al. | 711 | 129 | |
| | BJ | 6,473,828 B1 | 10/29/02 | Matsui | 711 | 104 | |
| | BK | 6,477,592 B1 | 11/05/02 | Chen et al. | 710 | 52 | |
| | BL | 6,477,614 B1 | 11/05/02 | Leddige et al. | 711 | 5 | |
| | BM | 6,477,621 B1 | 11/05/02 | Lee et al. | 711 | 120 | |
| | BN | 6,496,909 B1 | 12/17/02 | Schimmel | 711 | 163 | |
| | BO | 6,505,287 B2 | 01/07/03 | Uematsu | 711 | 170 | |
| | BP | 6,523,092 B1 | 02/18/03 | Fanning | 711 | 134 | |
| | BQ | 6,523,093 B1 | 02/18/03 | Bogin et al. | 711 | 137 | |
| | BR | 6,539,490 B1 | 03/25/03 | Forbes et al. | 713 | 401 | |
| | BS | 6,552,564 B1 | 04/22/03 | Forbes et al. | 326 | 30 | |
| | BT | 6,587,912 B2 | 07/01/03 | Leddige et al. | 711 | 5 | |
| | BU | 6,590,816 B2 | 07/08/03 | Perner | 365 | 200 | |
| | BV | 6,594,713 B1 | 07/15/03 | Fuoco et al. | 710 | 31 | |
| | BW | 6,622,227 B2 | 09/16/03 | Zumkehr et al. | 711 | 167 | |

EXAMINER

DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

| | | | |
|---|--|---|--|
| FORM PTO-1449 (REV.7-80) | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO. 33582/US | APPLICATION NO. Not yet assigned |
| INFORMATION DISCLOSURE STATEMENT <i>(Use several sheets if necessary)</i> | | APPLICANT(S) Joseph M. Jeddloh | |
| | | FILING DATE Concurrently herewith | GROUP ART UNIT Not yet assigned |

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|----|-----------------|----------|----------------|-------|----------|-------------------------------|
| | BX | 6,631,440 B2 | 10/07/03 | Jenne et al. | 711 | 105 | |
| | BY | 2002/0112119 A1 | 08/15/02 | Halbert et al. | 711 | 115 | |
| | BZ | 2002/0144064 A1 | 10/03/02 | Fanning | 711 | 144 | |
| | CA | 2003/0005223 A1 | 01/02/03 | Coulson et al. | 711 | 118 | |
| | CB | 2003/0043426 A1 | 03/06/03 | Baker et al. | 359 | 109 | |
| | CC | 2003/0229770 A1 | 12/11/03 | Jeddloh | 711 | 213 | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION | |
|--|----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | CD | | | | | | | |
| | CE | | | | | | | |
| | CF | | | | | | | |

OTHER PRIOR ART *(Including Author, Title, Date, Pertinent Pages, Etc.)*

| | | |
|--|----|--|
| | CG | Intel, "Intel 840 Chipset: 82840 Memory Controller Hub (MCH)", Datasheet, October 1999, pp. 1-178. |
| | CH | Micron Technology, Inc., "Synchronous DRAM Module 512MB/1GB (x72, ECC) 168-PIN Registered FBGA SDRAM DIMM", Micron Technology, Inc., 2002, pp. 1-23. |
| | CI | |
| | CJ | |
| | CK | |
| | CL | |

| | |
|----------|-----------------|
| EXAMINER | DATE CONSIDERED |
|----------|-----------------|

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).